

IT Inventory User Handbook for FY 2008

Background

State Statutes require mandatory annual updates to *all* state executive agencies' information technology (IT) assets. ARS 41-3504 (A (1(e))) states that GITA is to coordinate a "detailed list of information technology assets owned, leased or employed by this state." To expedite these submittals, GITA developed a web application for agencies to report their IT inventories online, namely Information Services Inventory System (ISIS). Upon request, IT inventories can be kept open for updates throughout the year as new equipment and software is purchased. In 2005, the CIO Council changed the annual IT inventory due date to September 30th to enable agencies more time for fiscal year-end processing.

Purpose of Statewide IT Inventory Maintenance

The statewide IT inventory is used for a variety of purposes including searches and statistics as requested by a variety of parties. In addition, GITA uses the information to analyze and track agency migration towards target IT technologies. Target technologies are identified under Arizona's Enterprise Architecture on GITA's website at http://azgita.gov/enterprise_architecture/. Platform and Software Target Technology tables are provided for making hardware and software assessments, with the intent of eventually reaching an open set of hardware and software for intercommunication between agencies, i.e. an enterprise architecture. Statewide Standard S815, Configuration Management provides more information on IT inventory maintenance.

IT inventory holdings are tracked in a four-level hierarchical set of categories in a SQLServer database. The highest-level categories are assets (both software and hardware) and custom-developed software applications.

SOFTWARE APPLICATIONS – Software applications refer to custom-developed or customized software products. The state is particularly interested in the platforms that applications are running on, which databases are supporting the applications, and the programming tools used for development. In addition, *critical* applications are of interest due to continuity of government and security concerns. The data elements for Applications are detailed under the *Data Elements* document located among the bulleted instructions beside the ISIS icon at www.azgita.gov/apps/.

HARDWARE AND SOFTWARE ASSETS - The IT asset inventory is organized into *three* additional levels or tiers: Asset Groups, Asset Types and Asset Codes. At the highest level, there are Asset Groups, namely: **End user devices** such as PCs, laptops, printers, projectors, scanners, PDAs, etc.; **Mainframes**; **Minicomputers**; **Servers**; **Software**; and **Telecommunications**.

Under each Asset Group, multiple Asset Types are identified as enumerated in the *Asset Type & Asset Code* document at www.azgita.gov/apps/. For example, under the Telecommunications Asset Group, there are *Asset Types* for switches, bridges, hubs, gateways, routers, voice equipment and voice power equipment.

Beneath asset types are asset codes. For instance, under the Voice Equipment Asset Type are found the following *Asset Codes*: Dial-up, TDM/PCM PBX, Tele-management Systems, Call Center Systems, and Voice Mail Systems. The required data elements for each of these items are listed in the *Data Elements* document also located at the website. Data elements are the actual products existing under each of these categories.

Getting Started

A unique username and password is required for access to each GITA online web application. An agency may obtain a username and password by contacting the GITA IT Planning Manager at (602) 364-4784 or emailing a request to ITplanning@azgita.gov. The same username and password may be used for both ISIS and PARIS. Please include the email address for each proposed user so that a private email with password can be sent to each person.

IT holdings are updated either **manually** or by performing an **upload of an Excel data file** in the required format; refer to the *ISIS Required Import File Format* section at www.azgita.gov/apps/. To manually add data, the

user clicks on either the ADD NEW APP or ADD NEW ASSET button, whichever is appropriate. An entry screen with required and optional fields is provided for all data elements. A complete listing of data elements and definitions is provided in the Statewide Standard P800-S815 Configuration Management, located online at www.azgita.gov/policies_standards/.

The website also lists current asset type spellings under *Asset Types & Asset Codes*. Since this is a database used for searches across many agencies, **exact spellings** of products and manufacturers are required. Exact spellings of manufacturers and current software products are found at *Inventory Naming Conventions for Manufacturers*, and *IT Inventory Software Product Asset Codes*. Both of these documents are found under the bullets at www.azgita.gov/apps/ prior to entering ISIS.

IT inventory data is rolled over in May of each year, so that an agency only has to add **updates** to their previous year's holdings. A manual edit is also available, if asset tag numbers have changed. *Agencies are strongly discouraged from use of OTHER since it provides no information for database searches.* If an agency has a new product or manufacturer, the new name can be added to the database in minutes by either a phone call or email to the IT Planning Manager at (602) 364-4784 or ITplanning@azgita.gov, respectively.

Past years' inventory data may be viewed through use of the SELECT INVENTORY heading in the left hand column. In addition, reports are available by choosing REPORT, then the appropriate report from the pull-down menu. The following **reports** can be generated using Adobe Acrobat:

- Entire Inventory
- All Inventory Hardware
- All Inventory Software
- All Inventory Applications
- Sub-Organizational Asset Summary
- Sub-Organizational Asset Software Summary
- Entire Agency Report
- Complete Sub-Organization Application Inventory

Because IT inventory assets are rolled over from one year to the next, it is highly recommended that agencies begin and end their inventory entry process by printing a report of their existing assets.

Features of ISIS

The most popular feature of ISIS is the ability to **upload data from other inventory systems**. GITA recognizes that many agencies already maintain IT inventories. In these cases, agencies may download their data from these systems, manipulate the data to meet GITA reporting requirements including naming standards and file format, and then upload their data into ISIS using the upload feature. This feature is found in the left-hand column under UPLOAD and merely requires an email address and a file location of the .csv file.

The email address is used to confirm receipt of the file and for any error messages. If the file is in the wrong format, ISIS cannot recognize anything so no error message is returned. Usually error messages are returned within ten minutes or less, if no response is received please alert the GITA IT planning manager at (602) 364-4784. It is also suggested that the first row of any upload be composed of all fields since any missing column will cause the data to be misinterpreted.

Agencies also have the ability to **download their asset data from ISIS**, if they wish. This feature allows agencies to develop custom reports using tools other than those offered by ISIS. Application data is not available for downloading at this time. Embedded control characters in the data can cause problems in downloads.

Another ISIS feature is the ability to apportion an agency into "**sub-organizations**" allowing each entity to maintain their own portion of the inventory. Also, each sub-organization has the ability to separately upload their specific data. In order to use this feature, the agency merely contacts GITA with the desired names of the sub-organizations. Presently, only a handful of agencies make use of this feature.

GITA can also clear out either agency hardware or software assets for the current year, upon request. Please allow at least a day for clearing out data.

Data Entry and Searching

Data entry is performed either manually or via the upload function mentioned above. An agency has the option of adding, editing or simply viewing existing applications or assets. By using a simple pull-down list, the Asset Group is selected followed by an Asset Type and then an Asset Code to identify each hardware and software asset. Searches of the existing assets are also provided using a Boolean 'and/or' function as part of the VIEW capability.

To edit data, click on the VIEW/EDIT APP or VIEW/EDIT ASSET button. If existing data is being modified, the appropriate item must be viewed first. To search for an existing inventory item, the Asset Group is selected under the GROUP drop-down list.

Once the correct Asset Group is selected, then choose the appropriate Asset Type provided in the drop-down list. Asset Types for each of the above Asset Groups are provided under *IT Asset Types & Asset Codes* at <http://www.azgita.gov/apps/>. Use the asset type search to locate the desired item by manufacturer name or code. Press the edit button, to modify the inventory asset as desired.

Specific **hardware models or software versions** are included in the Asset Code field and are built into the standard naming conventions used in the drop-down lists in the application. The current *IT Manufacturer Naming Conventions* document is located at <http://www.azgita.gov/apps/> and references the spelling of manufacturer names used within the ISIS application. The model and version fields are provided for agencies' own tracking purposes; however, agencies are encouraged to use the latest version of available products.

Import File Format

To perform a bulk data upload, the fields specified on the *ISIS Required Import File Format* are required in a comma-delimited file (.csv) and the IMPORT file option is chosen. The *ISIS Required Import File Format* is provided at <http://www.azgita.gov/apps/> and lists both optional and mandatory fields with field lengths, types and the required sequence.

Helpful Hints

Remember to add or update the required **inventory fiscal year** in the last field of the inventory upload or the data may be loaded into the wrong year.

An extra comma, such as one left in an address, can throw off all subsequent fields.

It is suggested that entering the field names in the required order as the first row in the file to be uploaded by ISIS helps to orient the data as well as **prevent EXCEL from deleting the first two columns**, if they happen to be left blank. The required fields are provided in *ISIS Required Import File Format* document at the GITA website.

Remember that unique asset tag numbers or serial numbers are now required on all items in the IT inventory.

Agencies are strongly discouraged from use of OTHER since it provides no information for database searches. If OTHER is used, amplifying data is requested in the COMMENTS column.

Misspelled manufacturer names including extra spaces or with misplaced capital letters can cause rejects. Please consult the current list of manufacturer at *IT Inventory Manufacturer Naming Conventions* located on the GITA website for exact spelling.

For convenience of classification of software products, an alphabetical listing of current software products by ISIS software category is provided at the website under *IT Inventory Software Product Asset Codes*.

State of Arizona
Government Information
Technology Agency

Make sure that the file to be uploaded is in a comma-delimited (.csv) format.

Do not use double quotes (") or the pipe (|) characters in any of the fields of the file to be uploaded.

PC monitors are **not** required in the IT inventory. CPUs are of interest, however. Network computers are defined to be lightweight computer systems that operate exclusively via a network connection, so that they lack secondary storage such as a hard disk drive, booting off the network but running applications locally using their own CPU and RAM. So Network Computers are distinct from terminals, which act as a clients for an application server.

UPS and Generators are found under *Voice Power Equipment Asset Type* and the *Telecommunications Asset Group*.

Fax machines are found under *Voice End User Device Asset Type* and *Telecommunications Asset Group*.

Duplicate items are rejected as well as items other than assets of interest. It is requested that items going to be surplussed, have their disposition changed to SURPLUS and left in the IT inventory until it is rolled over in May, prior to deletion from the maintained inventory. In this way, there is a history of what has happened to an item.

Upon completion of updating of this year's IT inventory, please change the Inventory Status to SUBMITTED so that the IT inventory update can be reviewed and either approved or modification requested. Modification requested is commonly required, if an agency has overused the OTHER category. Remember that once the inventory has been submitted, it is locked until approved.

Contact Us

If you run into a problem, please contact the IT Planning Manager at (602)364-4784 or send an email to ITplanning@azgita.gov. GITA staff has a lot of experience with this application and with IT inventories and can assist you in resolving any problems.